

## **REMARKS**

### **I. Introduction**

With the cancellation of claims 11, 12 and 23 herein without prejudice, claims 10 and 13 to 22 are pending in the present application. In view of the foregoing amendments and following remarks, it is respectfully submitted that all of the presently pending claims are allowable, and reconsideration is respectfully requested.

### **II. Rejection of Claims 22 and 23 Under 35 U.S.C. § 112**

Claims 22 and 23 were rejected under 35 U.S.C. § 112, second paragraph as allegedly indefinite. Claim 23 has been canceled herein without prejudice, thereby rendering the rejection of this claim moot. Applicant respectfully submits that claim 22, as amended herein, obviates this rejection. Therefore, withdrawal of this rejection is respectfully requested.

### **III. Rejection of Claims 10 to 23 Under 35 U.S.C. § 102(e)**

Claims 10 to 23 were rejected under 35 U.S.C. § 102(e) as anticipated by U.S. Patent No. 5,877,957 ("Bennett"). An inconsistency between page 2 of the Office Action, which states that claims 10 to 21 are rejected under 35 U.S.C. § 102(e), and pages 4 and 5 which provides the Examiner's reasoning relating to the anticipation of claims 22 and 23, is noted. Applicant proceeds on the basis that claims 10 to 23 are rejected under 35 U.S.C. § 102 (e) but requests clarification. Claims 11, 12 and 23 have been canceled thus rendering the rejection of these claims moot. It is respectfully submitted that Bennett does not anticipate claims 10 and 13 to 22 for the following reasons.

Claim 10 relates to a programmable controller, a display screen including a menu-assisted user interface, an operator unit including a button, the button capable of being switched to an active mode using a programmable function, at least one signal input terminal, at least one signal output terminal and a housing. Claim 10 further recites that the processing unit, the display screen, the operator unit, the at least one signal input terminal and the at least one signal output terminal are disposed in the housing. Claim 10 has been amended to recited that the at least one signal input terminal is configured to receive the at least one input signal. No new matter has been added, see the Specification, for example, at page 3, lines 30 to 32. Claim 10 further recites that a switching function of the controller is programmable in the programmed switching sequence according to predetermined functions using the menu-

assisted user interface. Claim 10 has been amended herein without prejudice to recite that the programmable controller includes a processing unit programmed to affect a switching sequence between, one of at least one input signal and at least one simulated input signal, and at least one output signal. Claim 10 has further been amended herein without prejudice to recite that an operation of the button in the active mode is configured to generate the at least one simulated input signal and to affect the switching sequence of the switching function between the at least one simulated input signal and the at least one output signal. No new matter has been added. See, for example, original claim 2 and the Specification at p. 2, lines 2 to 15.

Claim 20 relates to a programmable controller including a processing unit, a display screen, an operator unit including a button switchable to an active button in accordance with a programmable function, at least one signal input terminal, at least one signal output terminal, a common housing and an arrangement configured to program switching functions on the basis of predetermined function in accordance with a menu-assisted user interface on the display screen. Claim 20 has been amended to recite that at least one signal input terminal is configured to receive the at least one input signal. No new matter has been added, see the Specification, for example, at page 3, lines 30 to 32. Claim 20 further recites that the processing unit, the display screen, the operator unit, the at least one signal input terminal and the at least one signal output terminal are accommodated in the common housing. Claim 20 has been amended herein without prejudice to recite that the processing unit is programmed to affect a switching sequence between, one of at least one input signal and at least one simulated input signal, and at least one output signal. Claim 20 has further been amended herein without prejudice to recite that the switching sequence of the switching function is dependent on operation of the button in the active mode to affect the switching sequence of the switching function between the at least one simulated input signal, generated by operation of the button in the active mode, and the at least one output signal. No new matter has been added. See, for example, original claim 2 and the Specification at p. 2, lines 2 to 15.

Claim 21 relates to a programmable controller including a processing means, a display means, an operating means including a button switchable to an active button in accordance with a programmable function, at least one signal input terminal, at least one signal output terminal, a common housing and means for programming switching functions on the basis of a predetermined function in accordance with a menu-assisted user interface on

the display means. Claim 21 has been amended herein without prejudice to recite that at least one signal input terminal is configured to receive the at least one input signal. No new matter has been added, see the Specification, for example, at page 3, lines 30 to 32. Claim 21 further recites that the processing means, the display means, the operating means, the at least one signal input terminal and the at least one signal output terminal are accommodated in the common housing. Claim 21 has been amended herein without prejudice to recite that the processing means is programmed to affect a switching sequence between, one of the at least one input signal and the at least one simulated input signal, and at least one output signal. Claim 21 has further been amended to recite that the switching sequence of the switching function is dependent on operation of the button in the active mode to affect the switching sequence of the switching function between the at least one simulated input signal, generated by operation of the button in the active mode, and the at least one output signal. No new matter has been added. See, for example, original claim 2 and the Specification at p. 2, lines 2 to 15.

Claim 22 relates to a method for directing current by a programmable controller. Claim 22 recites that the programmable controller includes a processing unit, a display screen, at least one signal input terminal, at least one signal output terminal, a common housing and an arrangement configured to program switching functions on the basis of a predetermined function in accordance with a menu-assisted user interface including a button on the display screen. Claim 22 further recites that a sequence of a switching function is dependent on operation of the button. Claim 22 further recites that the processing unit, the display screen, the signal input terminal and the signal output terminal are accommodated in the common housing. Claim 22 further recites the step of entering a program into the processing unit including switching functions configured to control current flow between the at least one input terminal and the at least one output terminal. Claim 22 has been amended herein without prejudice to recite the step of operating the button in an active mode so as to generate at least one simulated input signal and so as to affect the switching sequence of the switching function between the at least one simulated input signal and the at least one output signal. No new matter has been added. See, for example, original claim 2 and the Specification at p. 2, lines 2 to 15.

Bennett purportedly relates to an automation system for programming appliances having programmable controllers, programmable devices and trigger devices that are stated to communicate over a communication link 16. The user is stated to program the

programmable devices in the following manner. First, the programmable controller is stated to be placed in its training mode, by pressing a train button 18. See col. 4, lines 50 to 54. Next, the trigger device is activated to generate a trigger signal, i.e., the user activates whatever device he or she wants to be able to trigger a response from the programmable controller. For example, the trigger event may be generated by an environmental sensor coupled to a communication link 16 or the opening or closing of a door, i.e., the user may want the opening or closing of a door to trigger, for example, the lighting of a lamp. See col. 5, lines 44 to 48. The trigger event is stated to be the first detected signal by the programmable controller 12 after it has been put in training mode. See col. 5, lines 59 to 62. The next step involves placing select programmable devices in their programmed state, i.e., telling the controller how the user wants it to respond upon receipt of the trigger signal. Abstract. For example, the user may turn on a lamp. See col. 5, lines 25 to 26. After all of the desired programmable devices have been put in their programmed states, the user takes the programmable controller out of its training mode. When the programmable controller is out of its training mode, it monitors the communication link for the trigger event. Upon detecting the trigger event, the programmable controller sends messages to the selected programmable devices instructing them to go to their programmed state.

The Final Office Action alleges that a terminal in electronics is any point that can be physically linked to something else, usually by wire, to form an electrical connection. See Office Action at p. 6. Applicant respectfully requests that the Examiner provide a copy of the dictionary relied upon. Applicant furthermore respectfully submits that communication link 16, whether over dedicated wiring or not, is not disclosed, or even suggested, to be connected to the automation system via a terminal, as recited in the claims.

Bennett states that communication link 16 may include home power lines, RF transmissions, messages over dedicated wiring, messages sent as data over phone lines and optical signals. See col. 6, lines 22 to 27. Therefore, regardless of the definition used for “terminal,” Bennett does not disclose, or even suggest, at least one signal input terminal configured to receive at least one input signal and at least one signal output terminal as recited in amended claims 10, 20 and 21, and at least one signal input terminal and at least one signal output terminal as recited in amended claim 22. As indicated above, Bennett states that the programmable and trigger devices communicate over a single communication link 16. Nowhere does Bennett disclose, or even suggest, separate input and output terminals, as recited in amended claims 10 and 20 to 22.

Bennett further states that the automation system may take the form of a menu driven whole house controller. See col. 15, lines 18 to 19. Pressing the console button labeled "Training" is stated to cause the system to display a menu which allows a user to enter a "Train House" state in which a switch is associated with a particular household appliance, for example, by first pressing the switch and then turning on/off the particular appliance. This action is stated to allow the switch to control the appliance. See col. 15, line 18 to col. 16, line 36. The operation of the "training" button does not affect a preexisting controller switching program given that it is used to program or "train" the controller in the first place. Accordingly, Bennett does not disclose a button which, when in the active state, is capable of affecting or initiating a switching sequence between the at least one simulated input signal and the at least one output signal, wherein the switching sequence of the switching function is already programmed to affect switching between the at least one input signal and the at least one output signal, as recited in the claims.

More specifically, Applicant respectfully submits that Bennett does not disclose, or suggest, an operator unit including a button, the button capable of being switched to an active mode using a programmable function, and a processing unit programmed to affect a switching sequence between, one of at least one input signal and at least one simulated input signal, and at least one output signal, wherein an operation of the button in the active mode is usable to generate the at least one simulated input signal and to affect the switching sequence of the switching function between the at least one simulated input signal and the at least one output signal, as recited in claim 10. Applicant respectfully further submits that Bennett does not disclose, or even suggest, a processing unit programmed to affect a switching sequence between, one of at least one input signal and at least one simulated input signal, and at least one output signal, wherein the switching sequence of the switching function is dependent on operation of the button in the active mode to affect the switching sequence of the switching function between the at least one simulated input signal, generated by operation of the button in the active mode, and the at least one output signal, as recited in claim 20. Applicant respectfully further submits that Bennett does not disclose, or even suggest, a processing means programmed to affect a switching sequence between, one of at least one input signal and at least one simulated input signal, and at least one output signal, wherein the switching sequence of the switching function is dependent on operation of the button in the active mode to affect the switching sequence of the switching function between the at least one simulated input signal, generated by operation of the button in the active

mode, and the at least one output signal, as recited in claim 21. Applicant respectfully further submits that Bennett does not disclose, or even suggest, the step of entering a program into the processing unit including switching functions configured to control current flow between at least one input terminal and at least one output terminal and the step of operating the button in an active mode so as to generate at least one simulated input signal and so as to affect the switching sequence of the switching function between the at least one simulated input signal and the at least one output signal, as recited in claim 22.

To anticipate a claim, each and every element as set forth in the claim must be found in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of Calif.*, 814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987). Furthermore, “[t]he identical invention must be shown in as complete detail as is contained in the . . . claim.” *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989). That is, the prior art must describe the elements arranged as required by the claims. *In re Bond*, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990). As more fully set forth above, it is respectfully submitted that Bennett does not disclose, or even suggest, all of the limitations of claims 10 and 20 to 22. More specifically, Bennett does not disclose terminals, let alone separate input and output terminals, as recited in claims 10 and 20 to 22. Further, Bennett does not disclose, or suggest, an operator unit including a button, the button capable of being switched to an active mode using a programmable function, and a processing unit programmed to affect a switching sequence between, one of at least one input signal and at least one simulated input signal, and at least one output signal, wherein an operation of the button in the active mode is usable to generate the at least one simulated input signal and to affect the switching sequence of the switching function between the at least one simulated input signal and the at least one output signal, as recited in claim 10. Further, Bennett does not disclose, or even suggest, a processing unit programmed to affect a switching sequence between, one of at least one input signal and at least one simulated input signal, and at least one output signal, wherein the switching sequence of the switching function is dependent on operation of the button in the active mode to affect the switching sequence of the switching function between the at least one simulated input signal, generated by operation of the button in the active mode, and the at least one output signal, as recited in claim 20. Further, Bennett does not disclose, or even suggest, a processing means programmed to affect a switching sequence between, one of the at least one input signal and the at least one simulated input signal, and at least one output signal, wherein the switching sequence of the switching function is

dependent on operation of the button in the active mode to affect the switching sequence of the switching function between the at least one simulated input signal, generated by operation of the button in the active mode, and the at least one output signal, as recited in claim 21. Further, Bennett does not disclose, or even suggest, the step of entering a program into the processing unit including switching functions configured to control current flow between the at least one input terminal and the at least one output terminal and the step of operating the button in an active mode so as to generate at least one simulated input signal and so as to affect the switching sequence of the switching function between the at least one simulated input signal and the at least one output signal, as recited in claim 22. Therefore, it is respectfully submitted that Bennett does not anticipate claims 10 and 20 to 22.

As for claims 13 to 19, which ultimately depend from claim 10 and therefore include all of the limitations of claim 10, Applicant respectfully submits that these claims are patentable for at least the same reasons provided above in support of the patentability of claim 10.

Applicant submits the following additional reasons in support of the patentability of claims 13, 14 and 16 to 18.

With respect to claim 13, Applicant submits that Bennett does not disclose, or even suggest, that the switching function can be interrupted by operation of the button in the active mode, as recited in claim 13. In support of its rejection of claim 13, the Office Action references col. 2, lines 26 to 47, however, this reference does not discuss use of a button to interrupt a program in the process of being executed. Rather, this reference merely discusses “training” or programming of the controller and the change of states upon detection upon detection of a trigger event, which triggers the running of the switching function. Therefore, Bennett does not anticipate claim 13.

With respect to claim 14, Applicant respectfully submits that Bennett does not disclose, or even suggest, that the operation of the button is performable at any point of the programmable switching function, as recited in claim 14. With respect to claim 16, Applicant respectfully submits that Bennett does not disclose, or even suggest, a second button and wherein the second button is capable of being switched to an active mode, as recited in claim 16. With respect to claim 17, Applicant respectfully submits that Bennett does not disclose, or even suggest, that the display screen is capable of displaying an instruction to operate the active button, as recited in claim 17. With respect to claim 18, Applicant respectfully submits that Bennett does not disclose, or even suggest, a display screen capable of displaying an

instruction to operate the active button and wherein the instruction to operate the active button is accompanied by an acoustic signal, as recited in claim 18. Respectfully, the plurality of buttons in Bennett referenced by the Office Action are not buttons which can generate at least one simulated input signal. Therefore, Bennett does not anticipate claims 14, 16 and 18.

In summary, Applicant respectfully submits that Bennett does not anticipate claims 10 and 13 to 22. Withdrawal of this rejection is therefore respectfully requested.

#### **IV. Rejection of Claim 18 Under 35 U.S.C. § 103 (a)**

Claim 18 was rejected under 35 U.S.C. § 103 (a) as unpatentable over the combination of Bennett and U.S. Patent No. 5,997,167 ("Crater et al."). Applicant respectfully submits that claim 18 is patentable over the combination of Bennett and Crater et al. for the following reasons.

Claim 18 depends from claim 10. As indicated above, Bennett does not disclose, or even suggest, an operator unit including a button, the button capable of being switched to an active mode using a programmable function, and a processing unit programmed to affect a switching sequence between, one of at least one input signal and at least one simulated input signal, and at least one output signal, wherein an operation of the button in the active mode is usable to generate the at least one simulated input signal and to affect the switching sequence of the switching function between the at least one simulated input signal and the at least one output signal, as recited in claim 10. Nor do Crater et al. remedy the deficiencies of Bennett. Therefore, the combination of Bennett and Crater et al. does not disclose all of the limitations of claim 18, which depends from claim 10.

In rejecting a claim under 35 U.S.C. § 103(a), the Examiner bears the initial burden of presenting a prima facie case of obviousness. *In re Rijckaert*, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). To establish prima facie obviousness, three criteria must be satisfied. First, there must be some suggestion or motivation to modify or combine reference teachings. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). This teaching or suggestion to make the claimed combination must be found in the prior art and not based on the application disclosure. *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991). Second, there must be a reasonable expectation of success. *In re Merck & Co., Inc.*, 800 F.2d 1091, 231 U.S.P.Q. 375 (Fed. Cir. 1986). Third, the prior art reference(s) must teach or suggest all of the claim limitations. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q.



580 (C.C.P.A. 1974). As stated above, the combination of Bennett and Crater et al. fails to disclose, or even suggest, an operator unit including a button, the button capable of being switched to an active mode using a programmable function, and a processing unit programmed to affect a switching sequence between, one of at least one input signal and at least one simulated input signal, and at least one output signal, wherein an operation of the button in the active mode is usable to generate the at least one simulated input signal and to affect the switching sequence of the switching function between the at least one simulated input signal and the at least one output signal, as recited in claim 10, from which claim 18 depends. It is therefore respectfully submitted that the combination of Bennett and Crater et al. does not render unpatentable claim 18. Therefore, withdrawal of this rejection is respectfully requested.

**V. Conclusion**

It is therefore respectfully submitted that all of the presently pending claims are allowable. All issues raised by the Examiner having been addressed, an early and favorable action on the merits is earnestly solicited.

Respectfully submitted,

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